# 1R-426-99

# REPORTS

DATE:

9-13-10

# L. Peter Galusky, Jr. Ph.D., P.G.

## **Texerra**

75 Wuthering Hts Drive Colorado Springs, CO 80921 Tel: 917-339-6791 E-mail: lpg@texerra.com

September 13<sup>th</sup>, 2010

Mr. Edward Hansen New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

Re: Notification of Groundwater Impact

Rice Operating Company – BD SWD System BD O-23 Junction Box (Vent) UL O, Sect 23, Township 21S, Range 37E NMOCD Case Number IR426-99

Sent via E-mail and U.S. Mail, Return Receipt No. 7007 2560 0001 9712

### Mr. Hansen:

Please be advised that groundwater samples taken as prescribed in the Investigation and Characterization Plan (ICP) for Rice Operating Company's BD O-23 Vent project (Figure 1) indicate elevated levels of chlorides. Groundwater samples taken from a near-source down-gradient monitor well tested 6,900 ppm and 7,700 ppm Cl- on April 20<sup>th</sup> and July 26<sup>th</sup>, respectively (see attached laboratory data). Dissolved hydrocarbons (as BTEX) were not detected in either sampling event.

ROC will install a monitor well up-gradient of the site and to sample this for chlorides to determine if the elevated levels observed are due to historical, up-gradient impacts or if they have been caused or exacerbated by past operation of this junction box. Once we have this data we will compile groundwater and soil bore analysis data and prepare and submit an ICP report. A Corrective Action Plan will also be submitted if our findings warrant this.

ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Please call either myself or Hack Conder of Rice Operating Company if you have any questions or wish to discuss this matter.

Thank you for your consideration.

Sincerely,

L. Peter Galusky, Jr. Ph.D., P.G.

Copy: Rice Operating Company

Copy: Rice Operating Company



Figure 1 – BD O-23 location. The general topographic gradient and presumed water table



August 2, 2010

Hack Conder Rice Operating Company 112 West Taylor Hobbs, NM 88240

Re: BD O-23 Vent

Enclosed are the results of analyses for sample number H20414, received by the laboratory on 07/26/10 at 1:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Benzene, T Method SW-846 8260 Benzene, T

Benzene, Toluene, Ethyl Benzene, and Total Xylenes Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Tribalomethanes (TTHM)

Method EPA 524.2

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely

Celey D. Keene

Laboratory Director



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER 112 W. TAYLOR HOBBS, NM 88240 FAX TO: (575) 397-1471

Receiving Date: 07/26/10 Reporting Date: 07/28/10

Project Number: NOT GIVEN Project Name: BD O-23 VENT

Project Location: T21S-R37E-SEC23 O~ LEA CO., NM

Sampling Date: 07/26/10 Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: JH

Analyzed By: ZL

LAS NUMBE SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE	07/28/10	07/28/10	07/28/10	07/28/10
H20414-1 MONITOR WELL #1	<0.001	<0.001	< 0.001	<0.003
To the contract of the contrac				
Quality Control	0.010	0.009	0.009	0.027
True Value QC	0.070	0.010	0.010	0.030
% Recovery	100	90.0	90.0	90.0
Relative Percent Difference	3.6	9.5	9.5	5.6

METHOD: EPA SW-846 80216

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,

AND TOTAL XYLENES.

Chemist

Date



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER 112 WEST TAYLOR HOBBS, NM 88240

FAX TO: (575) 397-1471

Receiving Date: 07/26/10 Reporting Date: 07/29/10

Project Number: NOT GIVEN

Project Name: BD O-23 VENT

Project Location: T21S R37E SEC23 O ~ LEA COUNTY, NM

Sampling Date: 07/26/10 Sample Type: WATER:

Sample Condition: COOL & INTACT

Sample Received By: JH

Analyzed By: HM

		CI	SO4	TDS
LAB NO.	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)
Analysis Date	7 ·	07/27/10	07/29/10	07/27/10
H20414-1	MONITOR WELL #1	7,700	394	12,500
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% Recovery		102	99,1	NR
Relative Perc	ent Difference	3.8	2.5	0.9
AETHOD: Stan	dard Methods, EPA	4500-CIB	375.4	160.1
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H20414 RICE

PLEASE NOTE: Liability and Damages. Cardinal's Sublity and client's exclusive remerity for any daim arising, whether based in centract or ton, shall be limited to the amount paid by client for analyses. All claims, including those for negligance and any other course whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be limited in incidental or consequential damages, including, without initiation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services forecasted region and of the above-stated reasons or otherwise. Results rolled only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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101 Sest Mariand - Hobbs, New	Tel (575) 593-2226 Tel (575) 593-2226 Fax (575) 593-24776	Campany Name: RICE, Operating Company	Total NOTES NOTES OF THE PROPERTY OF THE PROPE	Hack Conder	Address: (Street, Olly, Z.I)	122 W Taylor Street - Hobbs, New Mexico 88240	Phone #: (575) 393-9174	Project # Project Bank Bank Bank Bank Bank Bank Bank Bank	Project Lecation: T21S R37E Sec23 O ~ Lea County New Mexico	THE PROPERTY OF THE PROPERTY O	LAB #	(LAB USE)	けるジャレン Monitor Well #1				The second secon	Date Time:		gelinquished by ( Date: Time:	Delivered By: (Circle One)		pallipler - UPS - bus - Other	



April 29, 2010

Hack Conder Rice Operating Company 112 West Taylor Hobbs, NM 88240

Re: BD O-23 Vent

Enclosed are the results of analyses for sample number H19746, received by the laboratory on 04/23/10 at 2:00 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005 Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.2 Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene Laboratory Director



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER 112 W. TAYLOR HOBBS, NM 88240 FAX TO: (575) 397-1471

Receiving Date: 04/23/10 Reporting Date: 04/27/10 Project Number: NOT GIVEN

Project Name: BD 0-23 VENT

Project Location: T21S-R37E-SEC23 O- LEA CO., NM

Sampling Date: 04/20/10 Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: JH

Analyzed By: ZL

LAB NUMBE SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE	04/26/10	04/26/10	04/26/10	04/26/10
H19746-1 MONITOR WELL #1	<0.001	<0.001	< 0.001	<0.003
Quality Control	0.050	0.051	0.051	0.152
True Value QC	0.050	0.050	0.050	0.150
% Recovery	100	102)	102	101
Relative Percent Difference	12.5	12.8	13.0	14.4

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

Date



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER 112 WEST TAYLOR HOBBS, NM 88240 FAX TO: (575) 397-1471

Receiving Date: 04/23/10
Reporting Date: 04/28/10
Project Number: NOT GIVEN

Project Number: NOT GIVEN

Project Name: BD O-23 VENT

Project Location: T21S R37E SEC23 O ~ LEA COUNTY, NM

Sampling Date: 04/20/10 Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: JH
Analyzed By: SJ/HM

		CIT	SO <sub>4</sub>	TDS
LAB NO.	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)
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H19746-1	MONITOR WELL #1	6,900	505	12,500
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Not accredited for Chloride, Sulfate and TDS.

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H19746 RICE

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101 East Martand - Hobbs, New	7 to 1575) 345.2228	Company Name: RICE Operating Company	Project Management and project in the project of th	Hack Conder	Address: $(Street, O(V, Z)_0)$	122 W Taylor Street ~ Hobbs, New Mexico 88240	Plate #: /K7E\ 202 0474	(010) 000-01/4 Proposition and accompanies to the companies of the compani		Bearing to 123 Veni	TO A DOUBLE MACOO A 1 DO DOUBLE NOW MACOOD	くついいの			AB#	<del>rom prope</del>	LABUSE		PER ( III) Monitor Well #1					Relinquished by: Dale, Time	Rozaphie Benjson 19378 (3.59	Relinquished by: Date: Time:		Delivered By: (Circle One)	Sampler - UPS - Bus - Other:		